

ABSTRACT

A switching regulator converts an input voltage to a predetermined voltage and outputs the predetermined voltage to a load through an output terminal. The switching regulator

5 includes a first switching element, a second switching element, a control switching circuit part, and a smoothing circuit.

When a first operating mode in which a PFM control is performed and a voltage from the output terminal becomes a first voltage is shifted to a second operating mode in which a

10 PWM control is performed and the voltage from the output terminal becomes a second voltage larger than the first voltage, the control switching circuit part increases the voltage from the output terminal stepwise progressively from the first voltage to the second voltage while performing the

15 PWM control.